OBSERVATIONS AND REMARKS

ON THE ADVANTAGES OF

ELASTIC BELTS,

IN CASES OF

CORPULENCY,

DURING AND AFTER GESTATION,

ABDOMINAL TUMOURS,

ASCITES, OVARIAN DROPSY,

&c., &c.,

AS INVENTED AND MANUFACTURED BY

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(OPPOSITE MIVART'S HOTEL).

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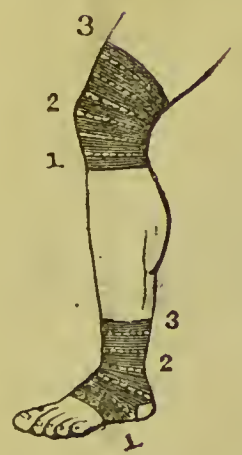
1854.

CAUTION.

Knee Cap & Ankle Piece.



Abdominal Supporter.

Spinal Supporter.

Stocking & Thigh Piece.

Mr. Bourjeaurd, in submitting the above four Engravings as illustrating the nature and special design of his apparatuses, most earnestly begs to call the attention of Professional Gentlemen to the gross and nefarious practices of unprincipled parties, who attempt to impose on the public by advertising their spurious apparatuses, accompanied with the closest imitations of his diagrams, and with the use even of the same words and plan of measurement, in order to obtain, by these fraudulent means, a portion of the patronage with which he has been especially honoured by the Profession. Mr. Bourjeaurd wishes, therefore, to caution Medical Gentlemen against the dishonest proceedings of his imitators, and hopes they will not accept any of the appliances put forward under the name of Spiral Supporter, except the articles come from his own Establishment, No. 11, Davies Street, Berkeley Square, (opposite Mivart's Hotel.)

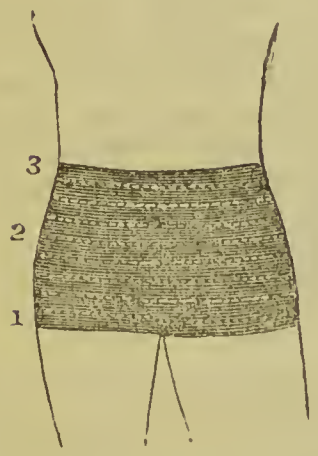
ON THE ADVANTAGES OF

MR. BOURJEAURD'S ELASTIC BELTS, &c.,

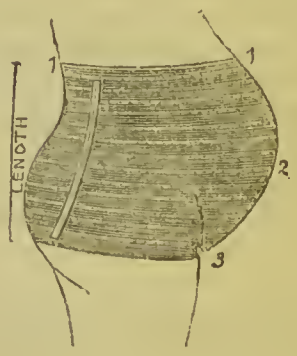
IN CASES OF

CORPULENCY, DURING AND AFTER GESTATION, ABDOMINAL TUMOURS, ASCITES, OVARIAN DROPSY, &c., &c.

Abdominal Supporter.



Abdominal Supporter in Corpulancy or Gestation.



From the accumulated facts that have come under my notice, through the kindness of medical friends both in hospital and private practice, I am deeply impressed with the idea of the great and many important benefits my newly-invented apparatuses are destined to accomplish in the hygieianic art, and wishing that the many sufferers from the affections, which my discoveries are especially calculated to alleviate, may have just and correct views on the subject, I have therefore, with due deference and respect, ventured to address to the Medical Profession a few general and practical remarks.

Every professional man knows how numerous are the instances in Medical and Surgical practice for which compression is called into operation, such as dropsical effusions, fibrinous exudation, &c., in the Physician's practice; and the Surgeon can scarcely advance a step without his having recourse to means for giving support and for effecting suitable pressure. Fractures, dislocations, congestion, induration, varicose veins, arthritic affections, &c., &c., are highly benefitted by equable compression used in due time, and with suitable apparatuses; and here let me add how much superior to the usual mode of bandaging is the system em-

ployed and recommended by me, through the use of the elastic appliances, which being disposed in a spiral manner effect a graduated compression, and which also can be regulated at will.

The various appliances alluded to are made of different degrees of strength, and may be so constructed, that in the same apparatus more pressure can be exerted in certain localities than in others. By my peculiar method, compression, by means of elastic tissue, may be applied without the slightest inconvenience to any part of the body; and I have obtained the most remarkable results in a great number of cases, where the Medical attendant of the patient required pressure in regions, varying from the vertex to the sole of the feet. Such cases exemplify in a striking manner how advantageous it is, both for the profession and patients, that especial attention should be paid by competent men to the best means of using elastic compression. I have for many years given to this subject much attention, and by degrees the different appliances for varicose veins, swelled legs, hernia, &c., &c., have been improved. Indeed, these apparatuses have now been so long in the hands of the profession, and I have in my possession such a long list of cases in which they have been successfully used, that I need hardly enter into any details respecting their value. I may, however, here state my firm belief that elastic appliances are probably not used to a sufficient extent in the practice of Surgery. Many of the rollers and bandages, usually applied, act but very imperfectly, and require much time and trouble in placing them upon patients; the period will no doubt come when they will be left aside, and replaced by a system of elastic contrivances which will be much more effectual, without giving one tenth of the trouble.

Take, for instance, the flannel-roller applied upon an ascitic patient at the moment of tapping. How much simpler it would be to guard the abdomen with a tight Elastic Belt, which would go on making pressure more and more gently as the fluid is being evacuated, and thus prevent, with much certainty, the unpleasant effects of the loss of support given to the intestines by the watery accumulation. This is an instance taken at random among a great many which might be cited. I may also mention œdema of one or both lower extremities, for only consider how troublesome and ineffectual is the perpetual bandaging of such limbs, and how much more to the purpose it would be to use an elastic casing which might vary in compressing force and size as the fluid or exudation is being absorbed! Happily, the principle has prevailed as regards hernial tumours; the Belt which I have lately invented for the support of these protrusions has fairly driven steel springs and hard pads from the field, and I have to congratulate both practitioners and patients upon the change. In a former pamphlet I have given my views in relation to Hernia Belts, and have shown, by facts and arguments, that no means are better calculated to prevent the dangers of strangulation, and the pain caused by ill-adjusted, hard and unyielding trusses, than the use of my Hernia Belts and Air Pads.

But I wish in the present instance to call especial attention to the improved and registered Elastic Belts which I have invented and introduced into this country, wherewith is effected, in a gentle manner, the kind of compression which is most needed in various affections which cause an enlargement of the abdomen. It will be easily understood by professional men, that there are numerous instances in which compression of a methodical and equable kind around the abdomen is very desirable, and a moment's reflection will show, that Elastic Tissues are eminently calculated to carry out such indications. I beg permission to pass in review the different affections, having their seat in the abdomen, which may be controlled by the system of compression which I have the honour of proposing; and I have no doubt that the general adoption of such a system will conduce to the happiest results. First, let us glance at the advantages which *corpulent* persons may derive from using my Elastic Abdominal Belts.

1. *Advantages of the Elastic Belt for corpulent persons.*—It is well known that nature has so regulated the human economy, that organs adapt themselves to the changes going on around them; and so also will muscular fibres acquire strength and energy in a healthy subject, when additional or increased functions are thrown upon them. But there are cases in which it behoves the Medical practitioner to lighten this task of nature, so that the efforts made by internal organs, or any portion of the muscular system, (of which efforts the patients themselves are mostly unconscious,) may not end, as is often the case, in inflammation or debility. We all know that the abdominal muscles are severely taxed when accumulation of adipose matter takes place within the cavity of the abdomen, and the effort these muscles make for resisting the pressure from within, is of such a kind as to cause much distress to the patient. The traction upon the chest, and the want of equillibrium, coupled with actual pain in the abdomen, have, no doubt, made many a corpulent person wish that something might be done for the relief of these unpleasant sensations.

I am happy to say that I have given much comfort to numerous persons who were greatly inconvenienced by corpulency, the uneasiness being removed by the use of my Elastic Belts. These, as stated above, are constructed upon a systematic scale, and composed of strips of elastic tissue, connected together in a peculiar manner, and of varying strength, according to the cases. They encircle the abdomen in an equable and uniform manner, and exert just enough pressure to take away the stress put upon the abdominal muscles, and to relieve the intestinal mass from its strained and pendulous condition. The fulcrum is situated against the spine, in which region the belt is strenghtened by pliable whalebone, and the belt may, without the slightest effort, be put on from below upwards, by being passed over the feet and legs, and thus the abdomen is kept *raised and supported*, and prevented from unsymmetrically protruding and pending over the pubis.

The comfort experienced by stout people, who wear these belts, is very great, and it is remarkable how nimbly they are enabled to walk, after

having experienced the discomfort of heavily wending their way, under the disadvantage of an unsupported hugely projecting abdomen. I must moreover mention that I have been informed by the Medical Attendants that the patients had the functions of digestion and chylification much better performed when enjoying the comfort of the belts, than when they allowed nature to remain unaided; so that I may safely say that the advantages gained by patients are threefold:—1st, absence of pain and dragging; 2nd, good digestion; and 3rd, symmetry of form. I need not say one word about the use of the Belt to corpulent persons who are in the habit of riding on horseback; but I shall just add that the gentle pressure which the belt exercises, is very likely to cause a certain amount of absorption of the adipose matter, and even when such is not the case, the pressure will at least go far in the prevention of any unpleasant *increase.* It will, therefore, be allowed that I have good grounds for strongly advocating corpulent people to use my belts; and I am at the same time anxious, that they should know that I make them exactly of the strength best suited for each individual case, and that the compressing force is calculated to a nicety, so as to answer the wishes of the medical attendant.

2. *Great usefulness of the Elastic Belts both during and after gestation.*—Professional men are fully aware of the amount of misery which is frequently experienced by ladies of delicate constitution or otherwise, with whom the uterine development is rather considerable; or whose abdominal muscles are too weak to bear up against the unwonted weight of the gravid uterus. I need not attempt to describe the train of evils which may attend pressure on the great veins or nerves in the vicinity of the uterus when gestation is approaching its termmination; it will be sufficient to say that a great number of women are unable to walk in the latter months of pregnency, that they experience considerable pain when attempting the slightest movements, and that swelling of the legs often torments them. Now it is evident that the unpleasant symptoms, connected with pressure on the pelvic and abdominal vessels or nerves, may be considerably diminished, by such support being given as will raise the gravid uterus gently upwards. This is attempted to be effected by some women in tying a broad piece of linen round the lower part of the abdomen and the nape of the neck; but this latter contrivance is coarse, rough, ungainly, and uncomfortable, and will be most advantageously and elegantly replaced by my Elastic Belt.

The belt is constructed in these cases with due regard for the comfort of the mother and safety of the fœtus in utero; the fulcrum is taken at the spine, in which region the Belt is made somewhat more resisting than in front; the Elastic Strips are so connected and varied in depth and direction, that the prominent abdomen is gently encompassed and raised from over the pubis, and the sense of weight and dragging at once relieved without the patient experiencing any pain, uneasiness, or discomfort. I am very anxious to point out that this belt, as well as the one above described, is put on by stretching it over the feet and legs, the support being thus given from below upwards. The abdominal muscles and viscera

are thus relieved without any undue pressure being used anywhere, or the slightest pain being felt. The practice of applying compression from above downwards, which is but too often practised by persons wholly unacquainted with the physiological and pathological laws of the human body, cannot be too strongly condemned; nothing but mischief can arise from this mistake, and it is strange that the error should ever have been made, as by compressing from above downwards, the uterus and abdominal viscera are manifestly driven against such resisting regions as the spine and the pubis. Matters are quite different when my Belt is worn, for it is so contrived that it gives support in the right direction, and by its accurately calculated elasticity, it leaves the important parts, contained in the abdomen and the pelvis, perfectly free. All the functions are normally performed, and the development of the fœtus is in no way interfered with, as the belt yields to the slightest pressure from within.

I shall not venture to determine the exact period when the belt should be worn, this must be left to the judgment of the medical attendant, but I would just state that many of the unpleasant symptoms connected with difficult gestation, might be prevented by the use of the Elastic Belt which I have introduced into practice, due care being had to ascertain the degree of elasticity which should be employed. The calculations as to the strength of tissue to be used are much more important than is generally supposed, and this is the reason why the men, who meddle with elastic appliances as a mere matter of trade, do so much mischief, by always following the same track, and using the same patterns and webbing, with all the patients who are sent to them. Elastic apparatuses, as applied to a variety of cases in medical, surgical, and obstetrical practice, form a sufficiently extended speciality, and no good results can be expected, except competent men take it up, and put forth their whole energies in varying and adapting them to the great multiplicity of cases which present themselves. I must not omit here to state that the ordinary stays should be put aside as soon as the belt is used. Indeed nothing can be more injurous to mother and child than the wearing of stays; and I wish I could induce ladies to put them aside altogether, whether pregnancy exist or not.

But to return to the Belt worn during gestation, I shall venture to give this opinion, that it will afford great relief by being worn from the fifth to the ninth month of pregnancy; and I may add that one of the principal advantages of the elastic belt is, in these cases, the comfort it gives to mothers *after* confinement. I make the belts of so delicate an elastic texture, that they might be used immediately after parturition, and be far preferable to the roller generally put on. The stronger ones, however, which are worn when the mother begins to get up, are decidedly of great value to those who are anxious for the look of their waists. As no means better calculated to preserve the symmetry and harmony of the figure could be devised, I earnestly entreat those members of the profession, who practice the obstretrical branch of the art, to impress upon their patients the necessity of wearing the belt either before or after

confinement, or both; so that ladies may reap all the benefits upon which I have above expatiated. It should here be noticed that, for nine months, the growth of the fœtus distends the abdominal muscles from within outwards; and, it is indeed extraordinary, that after the birth of the child no means are used to assist the muscles in regaining their position. No doubt but their elasticity does something towards this change, but this is no reason why they should not be assisted; and no apparatus answers this purpose better than the Elastic Belt. I have known many cases in which, after parturition, a certain amount of tumidity of abdomen remained; and by the use of my Belts this unpleasant corpulency entirely disappeared. I may confidently refer to some of the most distinguished accoucheurs of this metropolis, who have expressed their approbation of the Elastic Belts made by me, for the use of ladies either during gestation or after parturition.

3. *The Elastic Belt for Abdominal Tumours.*—The subject of abdominal tumors is confessedly one of the most obscure in medical practice, but it would be erroneous to suppose that none but doubtful cases are met with; on the contrary, the means of diagnosis have been carried to such perfection, that tumours connected with the liver, stomach, pacreas, mesentery, &c., &c., are now mostly made out. It is an unfortunate circumstance, however, that some of these tumefactions are of a very hazardous kind; but it happens, pretty frequently, that the development of tumors may be arrested by a well-directed and painless compression. The latter therapeutical resource is especially valuable with such tumors as are the result of bona-fide fibrinous exudation. It is well known that in such instances the absorption of pretty large masses of fibrine has been obtained, both when situated within the cavity of the abdomen, in its muscular walls, or in the cellular tissue immediately under the skin. I may here state, in passing, that the belt may be so made as to allow of sufficient compression about the groins, to dispel the unsightly and hardened masses which are apt to be left after the complete cicatrization of buboes. I may also incidentally mention that tumours of the breast, which admit of being dispersed by compression, may be advantageously treated by an elastic appliance, which I have invented, and which allows of pressure being exerted in the required degree on a given spot, without in the least interfering with the circulation of the mammary gland.

But as to tumours within the abdomen, it has been noticed by Physicians, that even those tumours which cannot be completely dispelled may, by proper compression, be controlled in their growth, and the patient be indefinitely relieved. Where, however, the element of the growth is principally fibrinous, and where little or no organic change has taken place, the wearing of the belt is truly invaluable, and followed by the happiest results; as I have had occasion to observe upon patients, whose medical attendants had requested me to construct belts intended to exert a certain degree of compression and no more. I shall not add any other considerations on this subject, and conclude by stating it to be my firm belief that the elastic belts are destined to work much good in the pathological changes to which I have just alluded.

4. *The Elastic Belt in Ascites.* This affection, I need hardly say, may depend on a variety of causes; but whichever may be the origin of the accumulation of serum in the peritonœal cavity, and whatever may be the indirect means which are used to lessen and eventually remove the dropsy, it will be allowed on all hands that a very powerful auxiliary in the treatment, is a compression of the abdomen. When this compression is used with judgment, that is to say, when it is uniform, elastic, equable, and well adjusted, it will wonderfully excite the absorbents, and conduce, in many cases, aided by other means, to bring on the complete disappearance of the fluid. Indeed, in simple ascites, depending on mere subacute inflammation of the peritonœum, or on a loss of balance between the functions of secretion and absorption, the elastic belt, which I beg here to recommend, is extremely valuable; the more so as the apparatus is so managed that it will remain sufficiently tight as the fluid is being absorbed. Cases will now and then present themselves, in which it is not advisable to have recourse to tapping, or where the patient objects to it; here the Belt is the only resource, and will act in such a manner as to prevent any unpleasant increase in the amount of the fluid distending the peritonæum. I mentioned, in the introduction to this pamphlet, how useful the belt would be if it were used in the operation of tapping, as it will follow the diminished size of the abdomen, by going on compressing in virtue of the elasticity of the tissue of which it is composed.

I may here cite an interesting case treated by the late Mr. Bransby Cooper. The lady whom he sent to me in 1852 was about 50 years of age; Mr. Cooper had tapped her three times in the space of 14 months before I saw her. He requested me to make an Abdominal Belt for this patient, and I am glad to say that no re-accumulation had taken place 18 months afterwards.

5. *The Elastic Belt in Ovarian Dropsy.* This distressing complaint is of so serious a kind, and occasions so much suffering and unhappiness in the patients who are attacked by it, that the ingenuity and skill of many eminent members of the profession have been exercised in order to discover means of cure or relief. Bold operations have been undertaken, tapping has extensively been had recourse to, but with the exception of a few successful cases, the results have not been encouraging. Among the therapeutical agents which have been proposed, there is one which certainly deserves a marked share of attention, I mean the treatment by pressure. This mode of obtaining the absorption of the fluid, and, in fortunate cases, the adhesion of the internal surfaces of the cyst, has been attempted in various ways, and almost always in a manner connected with a great deal of trouble, and very little steadiness and uniformity of compression. It may fairly be supposed that the want of success, which has been brought against the treatment, by pressure, may be owing to the imperfect and irregular manner in which that pressure was applied, and it has struck me that complete absorption of the fluid might be obtained, if compression were exerted in a systematic and regular manner, by means of my Elastic Belt. I am fully aware that the pressure upon the tumour should be carried out by a

resisting body, and I have for this purpose so arranged the belt, that it is connected with a large air pad, of course varying in size, according to the nature of the case, which may be made to compress the ovarian tumour more or less, without giving the patient any pain whatever, but on the the contrary, always tending to cheer her with the hope that she may be relieved from the unpleasant and dangerous burden contained in the ovarian cyst. It should be noticed that the belt at the same time compresses the abdomen, and thus gives support to the viscera, so that the functions of chylification and absorption, go on under favourable auspices.

The apparatus which I am proposing is destined to do much good, and to be instrumental in considerably diminishing the fatal results of a very distressing disease, and I am confident that, when this practice is generally adopted, ovarian dropsy will lose a great deal of its present fearful character.

The following case will, no doubt, be found interesting. A lady, 25 years of age, was sent to me by a surgeon, in the year 1852, to obtain relief from the unpleasant symptoms connected with an ovarian tumour situated on the left side, and of the size of an orange. I made for her a complete apparatus, and to her great happiness, she was enabled to leave the couch upon which she had spent the last six weeks and enjoy the pure air of the Isle of Wight, where she walked, on an average, five or six miles a-day, without feeling the least inconvenience. She can now indulge in horse exercise.

Having attempted to set forth the advantages, by the use of my newly invented Elastic Belts, in corpulency, during and after gestation, abdominal tumours, ascites, ovarian dropsy, &c., I hope I may have succeeded in carrying conviction, and that the members of the Medical Profession will do me the favour to inspect my various apparatuses, and hear from myself such explanations as may be deemed necessary, so that with confidence they may give them on all occasions a fair and considerate trial.

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